

IN THE SUMMARY OF THE INVENTION-AMENDED VERSION

1 The invention is a novel design of such a reusable hub for securing and removing a
2 disposable core made to fit to a standard valve, Luer or Luer lock type and attached to a hose
3 leading from a pump that is connected to a reservoir of liquid. A nozzle hub comprises:
4 A cylindrically-shaped wall extending downward to an exterior groove, then outward to a break
5 point defined by a hexagonal shape spaced apart from said exterior groove, downward there-
6 from along the faces to an adjacent fund-us which has a hexagonal perimeter; an interior
7 cylindrically-shaped barrel wall made with a slight inward slant or cast and extends downward
8 from the upper surface to said fund-us; a groove with a ledge defined by a vertical perimeter and
9 a flare extending inward from said perimeter; the top side of the groove is used to pull the seated
10 nozzle core from the Luer or Luer lock type taper; a longitudinal slot descending along the hub
11 set inward at an acute angle; a horizontal furrow intersecting said groove and spaced tangent to
12 said ledge defined by a vertical perimeter and a flare extending inward from the perimeter.
13 Wherein there is a controlled ratio of the diameter of said interior cylindrically shaped barrel
14 wall made with a slight inward slant or cast measured at any elevation between the tangency
15 point at the intersection of the flare extending inward from the perimeter and the fund-us and the
16 width of said longitudinal slot descending along said hub set inward at an acute angle measured
17 at an identical elevation of greater than 0.5. The nozzle hub for securing a nozzle core, wherein
18 a longitudinal slot extending downward along said hub, a nozzle core is compressed through the
19 slot, sliding along a horizontal furrow intersecting a groove and spaced tangent to a ledge defined
20 by a vertical perimeter, expanding to locate the nozzle core on the flare extending inward from
21 said perimeter. Currently, two designs exist for the hub. The concept behind each design is
22 different, according to the sensitivity of the dispensing process to the thermal response rate.
23 Initially, hubs were brazed to the core enabling fast heat transfer from the hub to the core. This
24 design trades increased cost for superior advantage in thermal response rate.
25 Accordingly, the main object of this invention is a novel nozzle hub that can be removed from
26 the nozzle core and reused, reducing cost to the consumer by allowing replacement of the
27 contiguous core held by the hub. The hub is retained to use for holding the next core. The hub
28 can be made from any material but those made for use in a heated application contain a high
29 percentage of copper. The nozzle hub permits disposal of nozzle core alone, reducing waste and
30 allows the nozzles to be made more economically and more useful in the relevant industry.

IN THE SUMMARY OF THE INVENTION-AMENDED VERSION

1 These and other objects of the invention will become clearer when one reads the
2 following specification, taken together with the drawings that are attached hereto. The scope of
3 protection sought by the inventor may be gleaned from a fair reading of the Claims that conclude
4 this specification.
5